AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A device for generating an oscillating signal, the device comprising:

[[a]] means for providing a current of spin polarized charge carriers;

a magnetic excitable layer adapted for receiving said current of spin polarized charge carriers thus generating an oscillating signal with a frequency ν_{osc}; and

an integrated means, different from said means for providing a current of spin polarized charge carriers, for interacting with said magnetic excitable layer to thereby select said oscillation frequency, wherein said interacting comprises performing magnetic interactions comprising inducing mechanical stress in said magnetic excitable layer.

2. (Original) A device according to claim 1, wherein said integrated means for interacting with said magnetic excitable layer is a means for controllable tunable interacting with said magnetic excitable layer such that a controllable tuning of said oscillation frequency is achieved.

3. (Canceled)

4. (Currently Amended) A device according to [[claim 3]] claim 1, wherein said magnetic interactions are interface interactions.

5. (Previously Amended) A device according to claim 1, wherein said interacting comprises performing any of magnetostatic interactions and exchange bias interactions.

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6. (Previously Amended) A device according to claim 1, wherein said magnetic excitable layer is a ferromagnetic semiconductor layer and said interacting comprises applying an electric field over said ferromagnetic semiconductor layer.

7. (Previously Amended) A device according to claim 1, comprising a means for generating a magnetic bias field to bias the magnetic excitable layer.

8. (Previously Amended) A device according to claim 7, wherein said means for generating a magnetic bias field is an antiferromagnetic layer which is in at least partial magnetic contact with said magnetic excitable layer.

9. (Previously Amended) A device according to claim 8, comprising a means for generating stress upon said antiferromagnetic layer.

10. (Previously Amended) A device according to claim 7, wherein said means for generating said magnetic bias field comprises an element of ferromagnetic material that is magnetostatically coupled to said magnetic excitable layer.

11. (Original) A device according to claim 10, further comprising a means for changing the geometric distances between said magnetic excitable layer and said ferromagnetic element.

12. (Previously Amended) A device according to claim 11, wherein said means for changing the geometric distances consists of one of a piezoelectric layer and a suspended structure.

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13. (Previously Amended) A device according to claim 1, wherein said integrated means for interacting with said magnetic excitable layer comprises an interacting layer that is coupled via one of magneto-elastically, magneto-statically and exchange bias effect to said magnetic excitable layer.

14. (Original) A device according to claim 13, wherein said interacting layer is a piezoelectric layer.

15. (Previously Amended) A device according to claim 13, wherein said interacting layer is an antiferromagnetic layer.

16. (Previously Amended) A device according to claim 13, further comprising a surface acoustic wave generating means that can generate a Surface Acoustic Wave in said interacting layer.

17. (Previously Amended) A device according to claim 16, wherein said interacting layer is a structural part of the Surface Acoustic Wave generating means.

18. (Previously Amended) A device according to claim 16, wherein said surface acoustic wave generating means generates a Surface Acoustic Wave in said interacting layer that has a frequency essentially equal to a magnetic resonance frequency of said excitable layer, or an integer multiple thereof.

19. (Previously Amended) A device according to claim 13, wherein at least two electrodes are provided on one of a surface and an inside of said interaction layer, which induces stress in said interaction layer by putting an electrical potential difference over them.

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20. (Previously Amended) A device according to claim 13, comprising a means for generating stress in said interaction layer by one of physical force and pressure build up.

21. (Previously Amended) A device according to claim 1, wherein said means for providing a current of spin polarized charge carriers is abutting on said magnetic excitable layer and comprises an electrode, a spin polarization means and a current confinement structure.

22. (Previously Amended) A device according to claim 21, wherein said means for providing a current of spin polarized charge carriers comprises a fixed layer with a constant magnetic polarization through which the current is passing, before entering into the excitable layer.

23. (Previously Amended) A device according to claim 22, wherein the fixed layer and excitable layer are separated by an interlayer to magnetically separate both layers.

24. (Previously Amended) A device according to claim 1, further comprising a readout structure that measures excitation caused by the spin polarized current passing through said magnetic excitable layer.

25. (Previously Amended) A device according to claim 1, further comprising a readout structure that measures magneto-resistance generated by a combination of the fixed layer and the magnetic excitable layer.

26. (Previously Amended) A device according to claim 1, further comprising a readout structure that comprises a piezoelectric measurement layer that converts precessional movement of the excitable layer into an electrical signal.

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27. (Previously Amended) A device according to claim 1, further comprising a readout structure that measures resistance change by measuring an AC signal between at least two electrodes in electrical contact with said excitable layer.

28. (Previously Amended) A device according to claim 1, further comprising a readout structure that measures change of one of resistance and voltage in a lateral geometry.

29. (Currently Amended) A method for generating oscillations, the method comprising:

providing a current of spin polarized charge carriers, thus generating an oscillating signal with an oscillation frequency ν_{osc} by interaction between said current of spin polarized charge carriers and a magnetic excitable layer; and

controllably tuning said oscillation frequency ν_{osc} by inducing an interaction between an integrated means, different from said means for providing a current of spin polarized charge carriers, and said magnetic excitable layer, wherein said interaction comprises performing magnetic interactions comprising inducing mechanical stress in said magnetic excitable layer.

30. (Original) A method according to claim 29, wherein inducing an interaction between an integrated means and said magnetic excitable layer comprises any of inducing mechanical stress in said magnetic excitable layer, inducing exchange bias interactions and inducing magnetostatic interactions.

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31. (Previously Amended) A method according to claim 29, said magnetic excitable layer being a ferromagnetic semiconductor layer, wherein inducing an interaction is performed by applying an electric field over said ferromagnetic semiconductor layer.

32. (Currently Amended) A method for reading out a magnetic element, the method comprising:

providing a current of spin polarized charge carriers, thus generating an oscillating signal with an oscillation frequency ν_{osc} by interaction between said current of spin polarized charge carriers and a magnetic excitable layer;

controllable tuning said oscillation frequency ν_{osc} by inducing an interaction between an integrated means, different from said means for providing a current of spin polarized charge carriers, and said magnetic excitable layer, wherein said interaction comprises performing magnetic interactions comprising inducing mechanical stress in said magnetic excitable layer; and

measuring an excitation caused by said spin polarized charge carriers.

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